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DISEASE SURVEY OF BLUE MUSSELS (*MYTILUS EDULIS*) FROM SELECTED DANISH COASTAL WATERS

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Mollusc pathogens such as *Marteilia* spp., *Bonamia* spp. and Oyster Herpesvirus-1 (OsHV-1) have yet not been detected in Denmark despite being prevalent in adjacent countries. Danish flat oysters (*Ostrea edulis*) from Limfjorden are declared free for bonamiosis and marteiliosis, but diseases and pathogens present in Danish molluscs in the areas outside of Limfjorden have not been investigated. This lack of knowledge may have devastating consequences, if pathogens are introduced to naïve populations due to stock movements. Six hundred and twenty-six blue mussels (*Mytilus edulis*) from 12 different sites were microscopically examined for the presence of *Marteilia* spp. and other parasitic and bacterial infections. Digenean trematode infections were the most prevalent finding. Inflammatory lesions, typically of focal character and containing disintegrated parasitic matter, were observed in 61 mussels from nine different sites. Metacercariae were found in 17 mussels from three different sites. Bucephalid sporocysts were observed in nine mussels from two different sites. Copepod infections were relatively rare; present in six mussels from two different sites. The only bacterial infection detected was with *Rickettsia*-like organisms. These were observed in 30 mussels from ten different sites. No *Marteilia* spp. was detected in examined samples. Furthermore, the mussels will be examined for OsHV-1 with qPCR. Preliminary results will be presented, and it will be discussed how such results can aid in elucidating the risk of emergence of OsHV-1 due to settlement of Pacific oyster (*Crassostrea gigas*) in Danish waters.